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10/822,048	04/08/2004	Robert L. Faulk JR.	200313930-1	2246

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

HALIYUR, VENKATESH N

ART UNIT	PAPER NUMBER
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2419

NOTIFICATION DATE	DELIVERY MODE
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10/17/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

Office Action Summary	Application No. 10/822,048	Applicant(s) FAULK, ROBERT L.	
	Examiner VENKATESH HALIYUR	Art Unit 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-25 is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 06/18/2008 has been considered for claims 1-25 but is ineffective to overcome Droms et al, Donaldson and Fan et al references for claims 1-17. Rejection follows.
2. Claims 1- 25 is pending in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Droms et al [US Pat: 7,143,435] in view of Donaldson [US Pat: 7,249,175].

Regarding claim 1, Droms et al in the invention of "Method and Apparatus for Registering Auto-Configured Network Addresses Based on Connection Authentication" disclosed a method of developing an access control list, comprising: developing an

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enhanced access control list (**item 146 of Fig 1**) including data related to at least one of user names (**user groups**), DNS names (**URL**), Windows domain names (**domain names**), and physical addresses (**col 8, lines 30-62**); DNS names into corresponding IP addresses according to data in the enhanced access control list (**col 9, lines 1-27, col 12, lines 50-67, col 13, lines 1-24**); and physical addresses (**MAC address**) into IP addresses according to data in the enhanced access control list (**col 10, lines 16-32, col 12, lines 21-32**); and developing the access control list from each of the operations of converting (**col 9, lines 14-27**), but fails to disclose converting at least one of user names into corresponding IP address. However, Donaldson in the invention of “Method and System for Blocking E-Mail having a Nonexistent Sender Address” disclosed a method for converting user names into corresponding IP addresses (**convert physical interface to logical interface, col 13, lines 25-49**).

Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention of made to include the method of converting user names into corresponding IP address as taught by Donaldson in the system of Droms et al to covert user names and physical addresses into IP addresses. One is motivated as such in order to determine an IP address with minimum latency to route an information packet based on user name and physical address.

Regarding claim 2, Droms et al disclosed storing the user names and corresponding IP addresses in a mapping state database that defines current relationships among user names (**col 7, lines 24-35**), DNS names, domain names (**col 12, lines 21-32**), and physical addresses (**col 11, lines 20-28, col 16, lines 1-19**).

Regarding claims 3, 11, Droms et al disclosed that each physical address comprises a MAC address (**col 10, lines 16-23, col 16, lines 1-19**).

Regarding claims 4, 13, Droms et al disclosed that converting user names into corresponding IP and physical addresses according to data in the enhanced access control list comprises: detecting login packets (**authentication, user ID and password**) being communicated over the network; determining a MAC address from the login packets (**col 2, lines 17-25**); detecting server message block login packets being communicated over the network (**col 2, lines 25-37**); and determining an IP address from the server message block login packets; and developing records in the access control list using the obtained IP address for the respective user name (**col 2, lines 38-52, col 8, lines 30-62**).

Regarding claims 5-6,13-14, Droms et al disclosed converting DNS names into corresponding IP addresses according to data in the enhanced access control list comprises: detecting packets having an unknown source IP address (**col 9, lines 14-24**); generating a DNS name query using the source IP address (**col 9, lines 24-27**); receiving a DNS name associated with the IP address responsive to the query; and developing records in the access control list using the obtained IP address for the respective DNS name (**col 8, lines 30-62**) and occasionally generating new DNS name queries for the source IP address and thereafter repeating the operations of receiving and developing to update the access control list (**col 12, lines 21-33**)..

Regarding claims 7, 15, Droms et al disclosed occasionally receiving the DNS name associated with the IP address and thereafter repeating the operation of developing to update the access control list (**col 12, lines 66-67, col 13, lines 1-9**).

Regarding claims 8,17, Droms et al disclosed converting physical addresses into IP addresses according to data in the enhanced access control list comprises: monitoring DHCP packets communicated over the network (**col 13, lines 10-15**); obtaining an IP address assigned to a particular physical address from the monitored DHCP packets (**col 11, lines 20-24**); and developing records in the access control list using the obtained IP address assigned to a respective physical address (**col 11, lines 25-36**).

Regarding claims 9-10, Droms et al disclosed a method of controlling access of a user to a network including a plurality of hosts coupled together through a network switch (**item 102 of Fig 1**), the method comprising: storing in the network switch an enhanced access control list containing data related to at least one of user names (**user groups, col 7, lines 24-35**), DNS names (**URL**), Windows domain names (**domain names**), and physical addresses (**col 9, lines 14-17, col 11, lines 20-28, col 12, lines 28-31, lines 50-67, col 13, lines 1-24**); and generating a dynamic access control list from the enhanced access control list, the dynamic access control list containing a plurality of IP addresses that restrict access of the user to the network (**col 16, lines 21-32**) and mapping user names to physical addresses; mapping physical addresses to IP addresses (**col 10, lines 16-32**); mapping unknown IP addresses to physical addresses; and mapping unknown IP addresses to DNS names (**col 8, lines 30-62**);

and applying rules set forth in the enhanced access control list relating to controlling access of a user to the addresses determined by the operations of mapping to generate the access control list (**col 9, lines 9-27**), but fails to disclose mapping user names to IP addresses.

However, Donaldson disclosed a method for converting user names into corresponding IP addresses (**Fig 8, col 13, lines 17-33**).

Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention of made to include the method of converting user names into corresponding IP address as taught by Donaldson in the system of Droms et al to covert user names and physical addresses into IP addresses. One is motivated as such in order to determine an IP address with minimum latency to route an information packet based on user name and physical address.

Regarding claims 12, 16, Droms et al disclosed that the mapping user names to IP addresses comprises: detecting server message block login packets being communicated over the network (**col 12, lines 50-67**); and determining an IP address from the server message block login packets and mapping unknown IP addresses to physical addresses comprises detecting packets having an unknown source IP address (**col 13, lines 1-18**).

Response to Arguments

6. Applicant's argument, see remarks, filed on 06/18/2008, with respect to rejection of claims 1-17 have been fully considered and is not persuasive for claims 1-17.

With respect to applicant's argument for claims 1, 9 dependent claims, that Droms does not teach or suggest storing in the network switch enhanced access control list including data related to at least one of user names, DNS names, Windows domain names, and physical addresses. However, the examiner respectfully disagrees and points applicants to the reference, where Droms disclosed a method where gateway (item 145 of Fig 1) which stores and maintains the access control list checks the source IP address in the message sent by the host via the network switch (item 102 of Fig 1) and further disclosed a method for checking the message for user names (user identification) and URL (domain names) by the DNS to process the request from host (col 12, lines 50-67, col 13, lines 1-24, Figs 1-2).

With respect to applicant's argument for independent claims 1, 9 and dependent claims, that Droms does not teach or suggest a method of developing an access control list, however, the examiner respectfully disagrees and points applicants to reference, where Droms disclosed a method for maintaining the access list and further disclosed adding IP addresses to the list for controlling the access (col 13, lines 1-24) to process the requests from hosts.

With respect to applicant's argument for independent claims 1, 9 and dependent claims, that Droms does not teach or suggest converting user names into corresponding IP and physical addresses according to data in the enhanced access control list.

However, the examiner respectfully disagrees and points applicants to reference, where Droms disclosed mapping (converting) physical address (MAC) and logical addresses (IP) for identifying the source and destination address of the request and response messages that is processed by the gateway (col 15, lines 60-67, col 16, lines 1-61). It is also well known in the art that such mapping of physical to logical address (or vice-versa) to convert physical to logical address in access lists to route the response messages during authentication and authorization process.

With respect to applicant's argument for independent claims 1, 9 and dependent claims that Donaldson does not teach or suggest converting user names into corresponding IP and physical addresses according to data in the enhanced access control list. However, the examiner respectfully disagrees and points applicants to reference, where Donaldson discloses a method of mapping physical LAN interface (physical address) to logical interfaces (IP address) and physical to logical address (or vice-versa) mapping by the router (col 13, lines 18-49). Also Donaldson further disclosed a method for dynamically updating and storing the IP addresses in access list for performing access verification during the address lookup process (col 9, lines 4-18, co 19, lines 37-54).

With respect to applicant's arguments for claims 18-25, the examiner agrees with the applicant's argument that the claims 18-25 are allowable as prior art fails to teach the claim limitation where forwarding circuit is operable to process the specific packets stored in the memory circuit using the enhanced access control list to generate the dynamic access control list and store the dynamic access control list in the memory

circuit, and therefore the allowability for claims 18-25 is indicated in this office action below.

Allowable Subject Matter

7. a) Claims 18-25 are allowed over prior art.

The prior art fails to teach and render obvious the limitations for a network switching circuit as claimed in claims 18 and 22:

“provide the specific packets on a processor port, and further operable to receive packets on one of a plurality of ports including the processor port and to forward each received packet to a port corresponding to a destination address contained in the packet subject to access restrictions contained in a dynamic access control list; a memory circuit coupled to the forwarding circuit, the memory circuit operable to store packets and operable to store an enhanced access control list and a dynamic access control list;”

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached @ (571)-272-7884. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

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/Venkatesh Haliyur/

Examiner, Art Unit 2419

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2419